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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,937	12/07/2000	Joseph L. Hellerstein	YOR920000581US1	9790

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EXAMINER

NGUYEN, THANH T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,937

Applicant(s)

HELLERSTEIN ET AL.

Examiner

Tammy T Nguyen

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |



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Detailed Office Action

1. This action is in response to the application 09/695203 filed. **June 30, 2000.**
2. Claims **1-20** have been examined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pohlmann et al., (hereinafter Pohlmann) U.S. Patent No. 6,446,136 in view of Koeppel et al., (hereinafter Koeppel) U.S. Patent No. 6,477,575.
5. As to claim 1, Pohlmann teaches the invention as claimed, including a computer-based method of constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices, the method comprising the steps of: selecting one or more event patterns representing event data associated with the network of

computing devices being managed by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22); automatically learning predicates of the one or more correlation rules from the one or more selected event patterns (col.col.5, lines 45-51, col.6, lines 14-19, col.5, lines 33-35); But, Pohlmann does not teach adding one or more corresponding actions to the one or more automatically learned predicates to form the one or more correlation rules. However, Koeppel teaches automatically learned predicates to from the one or more correlation rules (col.12, lines 55-60, automatically update content rules). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Pohlmann and Koeppel to have one or more corresponding actions to the one or more automatically learn predicates to form the one or more correlation rules because it would have allowed providers to perform automatic dynamic market testing and automatically adjusted served content based on responses from users (see Koeppel's col.14 lines 38-62).

6. As to claim 2, Pohlmann teaches the invention as claimed, further comprising the step of storing the one or more correlation rules in a rule database for access by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22).
7. As to claim 3, Pohlmann teaches the invention as claimed, wherein the event pattern selection step further comprises the step of a user marking the one or more event patterns in accordance with a data visualization of at least a portion of the event data (col.4, lines 27-35).

8. As to claim 4, Pohlmann teaches the invention as claimed, wherein the event pattern selection step employs a data mining algorithm (col.9, lines 1-5).
9. As to claim 5, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step comprises the steps of: learning an initial concept ; determining if acceptance criteria are met given the event data (col.5, lines 30-39, and col.6, lines 13-19); querying historical event data for similar event patterns (col.5, lines 27-35); and allowing the user to edit the initial concept based on the historical event data query (col.13, lines 23-28).
10. As to claim 6, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step utilizes one or more abstraction hierarchies (col.13 lines 14-20, and col.12, lines 46-50).
11. As to claim 7, Pohlmann teaches the invention as claimed, wherein the one or more abstraction hierarchies comprise a hierarchy for at least one of a host and an event type (col.4, lines 4, lines 27-45).
12. As to claim 8, Pohlmann teaches the invention as claimed, including apparatus for constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices, the apparatus comprising: at least one processor operative to: (i) permit selection of one or more event patterns representing event data associated with the network of computing devices being managed by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22); (ii) automatically learn predicates of the one or more correlation rules from the one or more selected event patterns (col.col.5, lines 45-51, col.6, lines 14-19,

col.5, lines 33-35); and a memory, coupled to the at least one processor, which stores the one or more correlation rules for access by the event management system (col.2, lines 15-30, and col.2, lines 52-55). But, Pohmann does not teach adding one or more corresponding actions to the one or more automatically learned predicates to form the one or more correlation rules. However, Koeppel teaches automatically learned predicates to form the one or more correlation rules (col.12, lines 55-60, automatically update content rules). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Pohlmann and Koeppel to have one or more corresponding actions to the one or more automatically learn predicates to form the one or more correlation rules because it would have allowed providers to perform automatic dynamic market testing and automatically adjusted served content based on responses from users (see Koeppel's col.14 lines 38-62).

13. As to claim 9, Pohlmann teaches the invention as claimed, wherein the event pattern selection operation further comprises a user marking the one or more event patterns in accordance with a data visualization of at least a portion of the event data (col.4, lines 27-35).
14. As to claim 10, Pohlmann teaches the invention as claimed, wherein the event pattern selection operation employs a data mining algorithm (col.9, lines 1-5).
15. As to claim 11, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning operation further comprises: (i) learning an initial concept; (ii) determining if acceptance criteria are met given the event data

(col.5, lines 30-39, and col.6, lines 13-19); (iii) querying historical event data for similar event patterns (col.5, lines 26-35, and col.8, lines 20-25); and (iv) allowing the user to edit the initial concept based on the historical event data query (col.13, lines 23-28).

16. As to claim 12, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning operation utilizes one or more abstraction hierarchies (col.13 lines 14-20, and col.12, lines 46-50).
17. As to claim 13, Pohlmann teaches the invention as claimed, wherein the one or more abstraction hierarchies comprise a hierarchy for at least one of a host and an event type (col.4, lines 4, lines 27-45).
18. As to claim 14, Pohlmann teaches the invention as claimed, an article of manufacture for constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices, the article comprising a machine readable medium containing one or more programs which when executed implement at least one of the steps of: selecting one or more event patterns representing event data associated with the network of computing devices being managed by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22); But, Pohlmann does not teach adding one or more corresponding actions to the one or more automatically learned predicates to form the one or more correlation rules. However, Koeppel teaches automatically learned predicates to form the one or more correlation rules (col.12, lines 55-60, automatically update content rules). It would have been obvious to one of ordinary skill in the art at

the time of the invention was made to combine the teachings of Pohlmann and Koeppel to have one or more corresponding actions to the one or more automatically learn predicates to form the one or more correlation rules because it would have allowed providers to perform automatic dynamic market testing and automatically adjusted served content based on responses from users (see Koeppel's col.14 lines 38-62).

19. As to claim 15, Pohlmann teaches the invention as claimed, further comprising the step of storing the one or more correlation rules in a rule database for access by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22).
20. As to claim 16, Pohlmann teaches the invention as claimed, wherein the event pattern selection step further comprises the step of a user marking the one or more event patterns in accordance with a data visualization of at least a portion of the event data (col.4, lines 27-35).
21. As to claim 17, Pohlmann teaches the invention as claimed, wherein the event pattern selection step employs a data mining algorithm (col.9, lines 1-5).
22. As to claim 18, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step comprises the steps of: learning an initial concept; determining if acceptance criteria are met given the event data (col.5, lines 30-39, and col.6, lines 13-19); querying historical event data for similar event patterns (col.5, lines 27-35); and allowing the user to edit the initial concept based on the historical event data query (col.13, lines 23-28).


23. As to claim 19, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step utilizes one or more abstraction hierarchies (col.13 lines 14-20, and col.12, lines 46-50).
24. As to claim 20, Pohlmann teaches the invention as claimed, wherein the one or more abstraction hierarchies comprise a hierarchy for at least one of a host and an event type (col.4, lines 4, lines 27-45).

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
26. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at **(703) 305-7982**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 4:30 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding this instant application, please send it to **(703) 872-9306**. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Bill Cuchlinski**, may be reached at **(703) 308-3873**.

TTN
April 14, 2004


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